

T. WEAVER.
Horse Hitch.

No. 84,450.

Patented Nov. 24, 1868.

Fig. 1

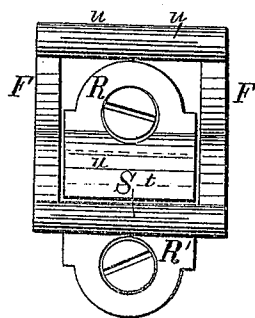


Fig. 2

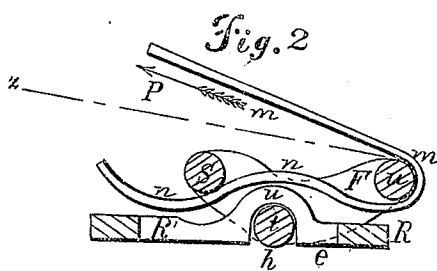


Fig. 3

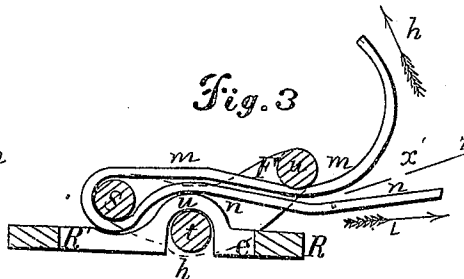


Fig. 4

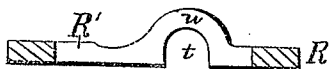
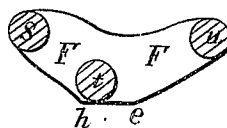


Fig. 5



Witnesses:

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Inventor:

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THEOPHILUS WEAVER, OF HARRISBURG, PENNSYLVANIA.

Letters Patent No. 84,450, dated November 24, 1868; antedated September 22, 1868.

IMPROVED SAFETY HORSE-HITCH.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THEOPHILUS WEAVER, of Harrisburg, county of Dauphin, and State of Pennsylvania, have invented a new and useful Safety Horse-Hitch; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the hitch inverted.

Figures 2 and 3 are sectional views of it, with a strap inserted.

Figures 4 and 5 are views of the bed-plate and the holder.

I construct my hitch in two such parts, as that, when they are combined, the hitch is rendered either a permanent or a releasable hitch, simply by its position on a post or other object, by placing it either direct or inverted.

The bed-plate, shown in fig. 4, is a flat bar, having a swell, *w*, and underneath it a cavity, *t*, for the retention and bearing of the trunnion-bar of the holder, shown at *t*, fig. 5. The ends, *R R'*, have screw-seats in them, and are unequally distant from *w*, the end *R* being short enough to let it revolve around *t*, passing between *t* and *u*, in combining the plate with the holder. Said plate has a suitable width to fit the inside of the holder between the flanges *F F*, as shown in fig. 1, thus insuring a free yet steady motion.

The holder, shown in figs. 1, 2, 3, and 5, has three transverse cylindrical bars, *s t u*, massed at their ends in the flanges *F F*. The distance *s t* is greater than the distance *t u*. Power applied at *u*, where the strap is inserted, is thus augmented at *s*, where the strap is held. The bar *t* is so situated, in relation to *s* and *u*, that when *t* is in its place in the plate *R R'*, the bar *s* will leave space enough between it and the plate to insert any size of strap, and the bar *u* will leave still more space between it and said plate, to facilitate the insertion of straps, as shown in figs. 2 and 3.

The flanges *F F* have a tread, *h l*, at the base, as shown in fig. 2. This tread acts, first, to stop the throw of the holder, as shown in fig. 2; second, to cock back the end *s* on to the strap, as shown in fig. 3. This is effected by placing the heel *h* of the tread *h l* a little out of centre with *t*, toward *s*. The friction of the heel *h* on the surface to which the hitch is fastened thus slightly clamps the strap and prevents play.

The swell or bulge *w* is a necessity to preserve uniform strength in the bed-plate. When said plate is inserted internally in the holder, with the bar *t* in its proper place as a trunnion, and the plate is then fastened, the holder is also held in position without any other device.

The operations are all effected by motion about the trunnion *t*.

The strap is inserted under *u*, over the swell *w*, around *s*, and back over the strap under *u*, as shown in fig. 3.

It is thus doubled or plicated at *m n*.

The animal is at *n*.

Draught applied at *n*, in any direction above the line *Z*, raises the head-bar *u*, depresses the foot-bar *s*, and thus holds the strap, not only by compression, under *s*, but, also, by the state of plication of the strap, as the under fold of the strap moves in a contrary direction to that of the upper fold, when the lever is cocked back and the strap is drawn. This state of plication also prevents the extraction of the strap when a gradual and gentle strain is on it, which may be the case when an animal tampers with it playfully.

Draught applied at *n*, in a direction below the line *Z*, permits the head *u* to fall, and the foot *s* to rise, and undoes the effects of plication and tension, and, consequently, releases the strap. This is to unhitch, but, also, designedly to insure safety to the animal, if he chance to become entangled in the hitch-strap while pawing or rolling, for the hitch will release itself automatically by thus changing the direction of draught.

Whether to have a permanent or releasable hitch, is, however, left optional with the purchaser, as it can be made to act as either—first, as permanent, in the position shown in fig. 1; second, as releasable in reversing its position.

This hitch is, moreover, a safety-device, because it does not protrude out far from a trough or post, and is thus less injurious to the eyes and shoulders of an animal while it is moving about incautiously. Besides, the holder is flexible, and will not hurt, as a rigid one will. It is simple, cheap, durable, and efficient.

I hereby disclaim, in this specification, external trunnions; also, equidistant trunnions on bed or holder; also, the insertion of a holder into a bed internally; but,

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The base *R R'*, substantially as herein set forth.
2. The holder *F*, with tread *h l*, and bars *s t u*, substantially as shown and described.
3. The arrangement of the base *R R'* and holder *F*, for the purposes specified.
4. Inserting a hitching-strap, plicated to form a release-hitch, substantially in the manner herein set forth.

THEOPHILUS WEAVER.

Witnesses:

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